The Capabilities of State Automated Systems To Meet Information Needs in the Changing Landscape of Human Services

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Automated systems are a critical tool for effectively managing human services; they support diverse users, including front-line caseworkers, state and local program administrators, and public officials who oversee programs. In the wake of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193) (PRWORA), states' assistance programs for needy families with children have undergone dramatic shifts in objectives, policies, and operations. These shifts have had profound implications across multiple programs for the information needs of states and localities and the automated systems designed to meet those needs. Moreover, PRWORA established time limits on assistance for recipients of Temporary Assistance for Needy Families (TANF) and new accountability measures for states, which heighten the importance of having automated systems that support efforts to help families obtain employment and become economically independent. The federal government, which has contributed billions of dollars to the development and operation of state automated systems for human services, has a major stake in helping ensure that these systems can meet the information needs to support welfare reform.

To assist congressional oversight and provide expertise to inform our work in this area, the U.S. General Accounting Office (GAO) and the Nelson A. Rockefeller Institute of Government jointly established the GAO/Rockefeller Institute Working Seminar on Social Program Information Systems in March 1998. The working seminar has about 30 members, including congressional staff, federal and state program and information technology managers, and welfare researchers. The working seminar has met eight times and heard presentations by invited speakers at several meetings. Meeting topics have included an "on-the-ground" view of linking automated systems in certain states, the range of obstacles to meeting information systems needs, and the perspectives of information technology vendors on systems modernization.

As we studied this subject area, we learned that there was little existing literature on the capabilities of states' automated systems to meet information needs for human services. While we encountered reported instances of major limitations in system capabilities, it was unclear how widespread such problems were. For example, a 1998 Washington

state legislative audit reported that case managers in the state had to log in and out of three separate automated systems just to complete one case and that they encountered tremendous frustration with system codes that were not user friendly.[1] To provide an empirical foundation for further analysis, GAO conducted fieldwork in collaboration with Rockefeller Institute researchers and issued a report in April 2000: <u>Welfare Reform: Improving State Automated Systems Requires Coordinated Federal Effort</u> (GAO/HEHS-00-48).[2] The report (1) assessed the capabilities of automated systems in selected states, (2) identified the approaches states are using to develop or modify their systems to better meet information needs, and (3) identified the major obstacles states have encountered in this process and the potential role of the federal government in helping overcome these obstacles.

This discussion paper presents our findings with regard to the first objective: assessing the capabilities of automated systems in selected states. I will first discuss how the shifting human services landscape has transformed states' automated systems needs. Then I will present what we learned about the capabilities of states' automated systems to meet information needs for welfare reform.

New and Evolving Welfare Environment Has Transformed States' Automated Systems Needs

Automated systems have been used in human services programs since the 1970s to help determine eligibility, calculate benefit amounts, and provide some data for oversight, such as aggregate data on caseloads and expenditures.[3] However, welfare reform has placed new demands on automated systems due to factors such as dramatic shifts in program objectives and operations, greater efforts to partner with other organizations in serving needy families, and greater devolution of responsibility to localities. The age of

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[1] State of Washington Joint Legislative Audit and Review Committee, <u>WorkFirst Process Study—Phase I</u>, Report 98-10 (Olympia, WA: Dec. 11, 1998).
[2] This report is available on-line at <u>http://www.gao.gov/cgi-bin/fetchrpt?HEHS-00-48</u>.

[3] For a history of the development of automated systems for human services, see Terrence Maxwell, <u>Information Federalism: History of Welfare Information Systems</u>, a working paper (Albany, NY: The Nelson A. Rockefeller Institute of Government, 1999).

many states' automated systems further compounds the challenge states face in meeting new information needs.

PRWORA's heightened emphasis on work and the temporary nature of aid required a fundamental cultural shift and has implications beyond the TANF program and its workers. To better support this new work focus, many states and localities have changed how their welfare offices and caseworkers do business. For example, they have converted welfare offices into job placement centers and focused the efforts of caseworkers on helping clients address and solve problems that interfere with employment, such as lack of child care or transportation as well as more complex mental and physical health problems.[4] A recent report by the U.S. Department of Health and Human Services (HHS) on information technology for welfare reform characterized the transition of the nation's human services programs from an income maintenance to a self-sufficiency focus as the "overarching issue" for automated system modernization.[5] The report contrasts the characteristics of information needed for an income maintenance system with those needed for a self-sufficiency system. For example, whereas information needs for the former are met almost exclusively through internal systems, information needs for the latter are met through a wide-ranging network of internal and external information systems. While information needs for issuing timely and accurate benefits are relatively straightforward and consistent across recipients, information needs for moving clients to self-sufficiency are complex and variable. In sum, the expansion of program objectives under TANF has resulted in the need for information of much greater depth and breadth; caseworkers need information that supports decision-making regarding service provision, rather than rule-driven eligibility, according to the report.

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[4] For further information on how states have implemented welfare reform, see <u>Welfare Reform: States Are Restructuring Programs to Reduce Welfare Dependence</u> (GAO/HEHS-98-109, June 18, 1998).
[5] U.S. Department of Health and Human Services, Administration for Children and Families (prepared by the State Information Technology Consortium), <u>Welfare Reform Information Technology: A Study of Issues in Implementing Information Systems for the Temporary Assistance for Needy Families (TANF) Program</u> (Washington, D.C.: HHS, Oct. 2000).

In many cases, states and localities have enhanced their efforts to partner with other organizations to serve needy families, which creates demands for sharing data across organizations. Data sharing can raise a host of issues, such as data confidentiality and security. As welfare agencies focus on moving needy families toward economic independence, frontline workers are drawing on other federal and state programs, often administered by separate agencies, to provide a wide array of services. While local welfare agencies typically determine eligibility for TANF, food stamps, and Medicaid, other programs that provide key services to TANF clients may be administered by separate entities, such as housing authorities or education agencies. Most notably, because TANF has focused welfare agencies on employment, a focus that has long been the province of state and local workforce development systems, welfare agencies need to work more closely than before with workforce development systems. The goal of service integration has been reinforced by the Workforce Investment Act of 1998 (P.L. 105-220), which requires that all states use one-stop career centers to deliver most employment and training services. While TANF agencies are not a required partner at one-stop career centers, Labor has encouraged states to involve human service agencies in the planning and delivery of services. Finally, in many cases state and local welfare reforms involve a greater effort to partner with community organizations, including faith-based organizations, to meet the needs of low-income families.

Devolution is another key factor that has contributed to the expansion of information needs for human services. Within the framework of certain new accountability measures, such as mandated minimum work participation rates, PRWORA gives states greater flexibility in designing and operating their programs under TANF. Some states in turn have devolved substantial authority to localities for their TANF programs, which means that state automated systems will be called upon to support a potentially more diverse range of local program goals and operations. For example, Ohio state officials told us that the substantial diversity of operations among the state's 88 counties has complicated considerably the process of designing an integrated client management system that will support local needs. Moreover, providing automated support for

localities is typically an evolving process, since local information needs can change as caseload composition changes, service strategies evolve, or new policy issues emerge.

The challenges of meeting information needs in the shifting environment of human services are compounded by the fact that many states are using automated systems that are old. For its report to the Congress on data processing capabilities for TANF, HHS surveyed states to determine when their existing systems for Aid to Families With Dependent Children (AFDC)—as of August 22,1996, the date of enactment of PRWORA—had first become operational. Twenty-six percent of states reported that their systems first became operational in the 1970s and 40 percent reported that they became operational in the 1980s.[6] The HHS report goes on to point out that generally accepted information technology standards assume that the average useful life of a large-scale computer system ranges from 5 to 7 years, and after that period of time, new technological advances make it advantageous to replace the system. Moreover, the report maintains that the age of states' systems has limited their ability to take advantage of technological improvements because the underlying equipment and software platforms of these systems do not lend themselves easily, if at all, to new technological advancements.

Current Automated Systems Do Not Always Fully Support State and Local Efforts to Help TANF Recipients Move to Employment

Current automated systems in the states we studied provide support for implementing and overseeing welfare reform in many critical areas. However, a number of these systems have shortcomings that limit their usefulness in helping to move TANF recipients toward employment and economic independence. In particular, automated systems sometimes do not share information about TANF recipients needed by the different agencies that serve them and in some cases offer limited capabilities to query and manipulate data, which prevents users from readily obtaining aggregate information to support program management.

In collaboration with field researchers from the Rockefeller Institute, GAO conducted in-depth fieldwork at the state and local levels in six states: Georgia, New Jersey, Ohio, Texas, Washington, and Wisconsin. On the basis of our fieldwork, we identified several key topics for follow-up work on a larger geographic scale. We developed and administered a questionnaire in these six plus an additional nine states to obtain information on topics such as the extent to which automated systems for different programs share data and the overall extent to which different types of information needs are met by current systems. The responses obtained from the questionnaire provided information for 15 states and 15 localities.[7]

We focused on three broad types of information needs: those for case management, service planning, and program oversight. Case management refers to the full range of tasks involved in arranging and coordinating the various services provided to an individual client, such as helping the client obtain a job, providing referrals to needed training and support services, and monitoring the client's progress towards employment. Users of information for case management include case managers, employment service specialists, and other frontline workers who serve individual TANF clients. Service planning requires <u>aggregate</u> information on the characteristics and service needs of the caseload to determine the appropriate services that should be made available for the caseload. Local and state program administrators are the primary users of this type of information. Program oversight requires aggregate information on relevant measures of program performance, such as job entry, job retention, and wage progression of TANF clients; clients diverted from monthly cash assistance; families' use of other programs, such as food stamps, Medicaid, and child care; and families returning to welfare. Users of this type of information include local and state program administrators and officials at all levels of government responsible for overseeing human service programs.

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[6] U.S. Department of Health and Human Services, Administration for Children and Families, Office of State Systems, <u>Report to Congress on Data Processing and Case Tracking in the Temporary Assistance for Needy Families Program</u> (Washington, D.C.: HHS, Dec. 1997).

[7] The states were Arizona, Georgia, Kansas, Minnesota, Mississippi, Missouri, New Jersey, New York, Ohio, Texas, Utah, Washington, West Virginia, Wisconsin, and Wyoming. For information about the local respondents and our overall methodology, see chapter 1 of <u>Welfare Reform: Improving State Automated Systems Requires Coordinated Federal Effort</u>.

<u>Insufficient Links Among Automated Systems Constrain Case Managers' Ability to
Coordinate Services and Monitor Recipients' Progress</u>

Figure 1 presents the assessments of officials from 15 localities of the overall extent to
which current automated systems support case management. While 5 of the localities
indicated that automated systems provide all or most of the information that TANF case
managers need to support their clients' movement to employment and economic
independence, the other 10 localities said that automated systems provide about half or
less of the information needed. Thus, the majority of these localities see major gaps in
the capabilities of their current automated systems to support frontline workers.

**Figure 1: Proportion of Information Needed for Case Management That Is
Provided by Automated Systems**

Number of Localities Responding in Each Category

Number of Localities=15

Proportion of Needs Met
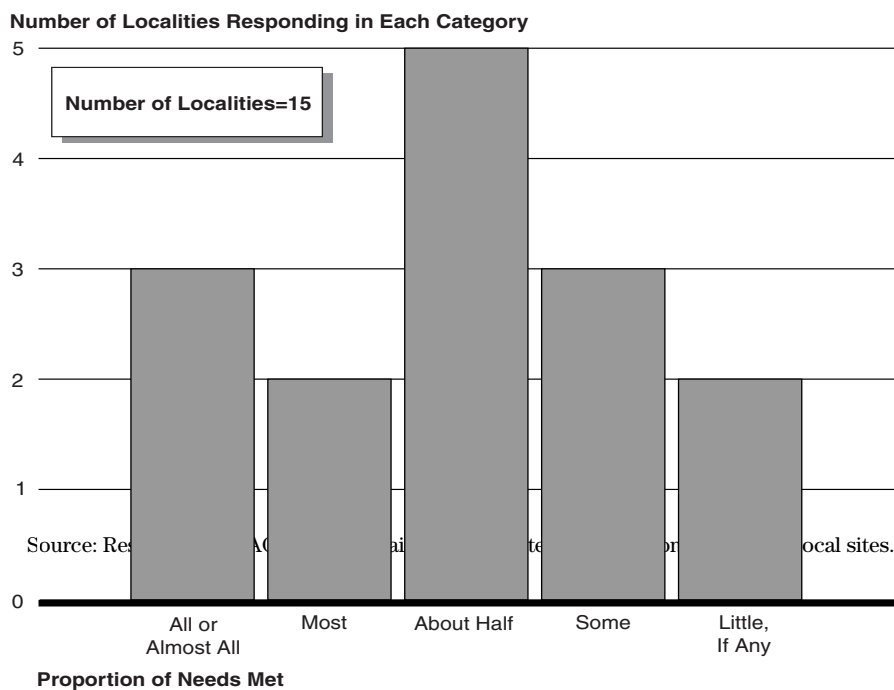
Source: Responses to GAO's questionnaire on automated systems from officials at local sites.

A major shortcoming of current automated systems, cited to varying degrees in the six
states in which we did in-depth fieldwork, is that some of the systems used by the
agencies providing services to TANF recipients do not share data on these recipients.
This shortcoming constrains the ability of case managers to arrange needed services;

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ensure that these services are provided; and respond quickly when problems arise, such as when a recipient does not attend a scheduled work activity. For example, local officials in New Jersey told us that some TANF recipients have received sanctions in error because data are not transferred electronically between the labor department's system that tracks attendance at work activities and the welfare department's system that issues sanctions for failure to meet work requirements.

In the absence of links between automated systems, local officials in our study states generally said that paper forms or telephone contacts are used to refer recipients to, or obtain information on their use of services such as vocational education, secondary education, substance abuse services, and mental health services. The reliance on paper forms was cited as a major burden for case managers because of the substantial amount of time involved in collecting all the needed forms from service providers and keying data from these forms into automated systems. At many sites, the problem was reported to be compounded by the need for double or even triple data entry for some items: case managers or other frontline workers must separately input the same data, such as a recipient's entry into employment, into different automated systems because the data are not automatically transferred and updated from one system to the other. Local officials told us that multiple entry of the same data not only reduces the time available for work directly with clients but also increases the risk of introducing errors into the data contained in automated systems.

The extent to which states have established links among automated systems for human services varies substantially. In the 15 states we surveyed, the systems that support TANF eligibility determination are, in almost all cases, linked with the automated systems for food stamps, child support enforcement, TANF work activities, Medicaid eligibility determination, and transportation subsidies for TANF recipients, as shown in figure 2. These links reflect federal mandates and enhanced federal funding for automated system links in these programs. In contrast, automated systems for other services that TANF recipients may need to facilitate their movement toward employment, such as job training, welfare-to-work grant services, vocational

rehabilitation, job listings, and subsidized housing, are generally not linked to systems for determining TANF eligibility. While figure 2 focuses on linkages between the systems for determining TANF eligibility and the systems for other programs, there are other linkages that are potentially useful for welfare reform. For example, officials in several localities told us that it would be useful to have their automated system for TANF work activities linked to their automated system for job listings to facilitate tracking TANF recipients' job search activities and referrals to job listings. Moreover, there is a wide range of other system links that are potentially useful for welfare reform, including links to automated systems for public education, mental health services, and criminal justice.

Figure 2: Programs With an Automated System That Either Is the Same as, or Shares Data With, the System Used for Determining TANF Eligibility

Number of States Responding in Each Category

Program/Service
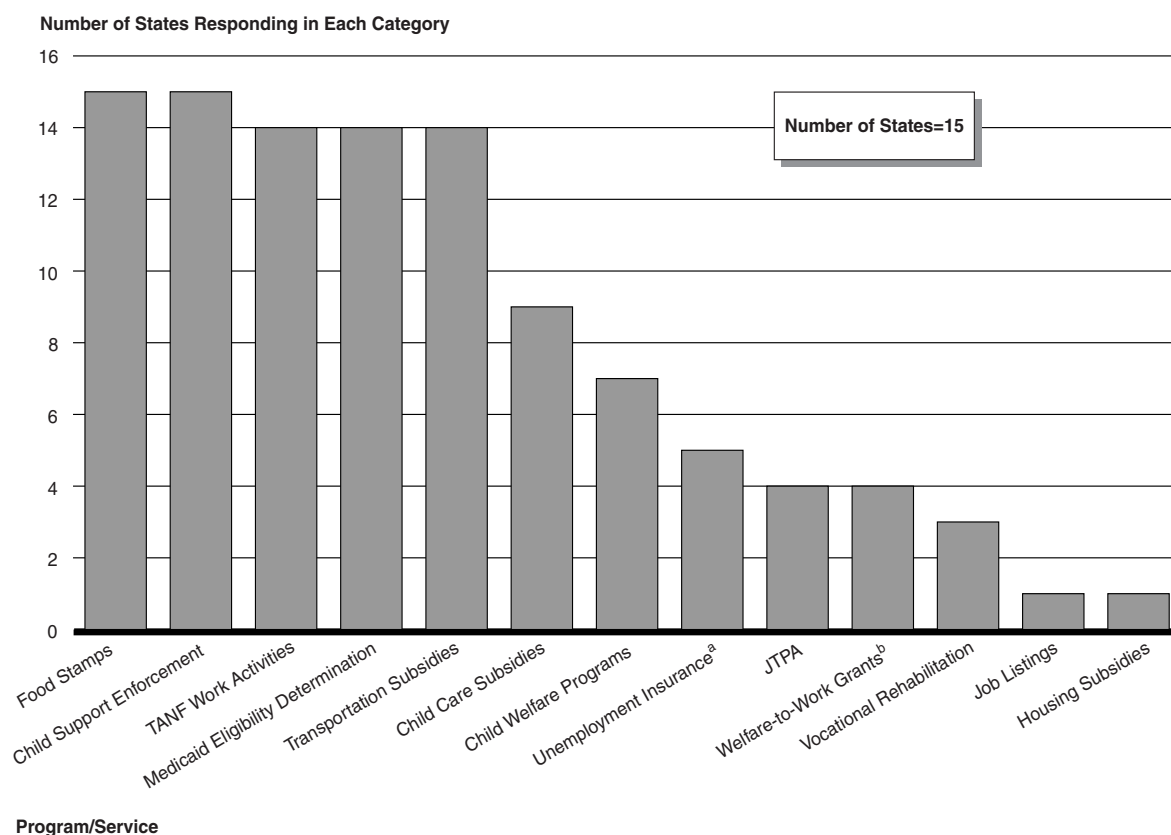
Notes: We asked state officials to indicate whether the automated system used for each of the specified programs is (1) the same system as used for determining TANF eligibility, (2) a separate system that is linked to the system used for TANF eligibility, or (3) a separate system that is not linked to the system used for TANF eligibility (that is, the systems do not share data). This figure shows the number of states that responded either "1" or "2" for each of the programs; thus, lower bars indicate a larger number of states in which a program is supported by a separate system that does not share data with the system for determining TANF eligibility.
[a]One state did not respond to the question on unemployment insurance.
[b]One state did not respond and another did not receive welfare-to-work grants.

It is important to recognize that even when there are automated system linkages between programs, it is not necessarily the case that these linkages meet all the information needs of case managers relative to these programs. For example, since system linkages can vary considerably in the amount of data that are shared, the usefulness to case managers of a particular linkage can depend on the specific data elements from another program that are accessible to them. Furthermore, another issue that can affect the usefulness of a particular linkage is how current are the data that are shared. Data can be available on a real-time basis, which means that users of one automated system have access to the data that are currently in another system. In contrast, data can also be available on a less current basis, such as if the data shared are obtained through daily, weekly, or monthly extracts from another data system. For example, local officials in Washington told us that while the state's automated systems for TANF eligibility and TANF work activities exchange data nightly, case managers need real-time data from these systems to perform their roles in the most effective manner.

A report by UC Data at the University of California at Berkeley indicates that states are actively engaged in linking administrative data across different social service programs. UC Data reviewed data linking projects in 26 states, which represented over 80 percent of the national welfare population. The percent of these states with projects to link data from AFDC/TANF, food stamps, and Medicaid eligibility systems to data from other specified programs ranged as follows: Unemployment Insurance (68 percent), child support (64 percent), child care (45 percent), foster care (41 percent), and child protective services (36 percent).[8] The report indicates that these projects encompass different types of data linking, such as extracting files to create linked data sets, creating data warehouses,[9] and developing integrated systems that allow queries across programs.

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[8] UC Data, University of California at Berkeley, An Inventory of Research Uses of Administrative Data in Social Services Programs in the United States—1998, report to the Northwestern University/University of Chicago Joint Center for Poverty Research (Berkeley, Calif.: University of California, Feb. 1, 1999).

[9] Data warehouses are large databases that integrate information collected from disparate sources and are separate from the databases used for daily business operations.

<u>Difficulties in Querying Automated Systems to Obtain Needed Information Limit
Capabilities for Service Planning</u>

In addition to supporting the activities of TANF case managers, automated systems can
provide aggregate information on the characteristics and service needs of recipients to
help program managers determine the appropriate services to provide for their overall
TANF caseloads. However, as shown in figure 3, the 15 states we surveyed vary
considerably in their assessments of the level of automated support available for service
planning, and local officials tended to assess the level of support lower than state
officials did. While state officials from 8 of the 15 states indicated that automated
systems provide all or most of the information on the TANF caseload that state program
managers need for service planning, officials from 6 of the 15 localities responded that
systems provide all or most of the information needed by local program managers.

**Figure 3: Proportion of Information Needed for Service Planning That Is
Provided by Automated Systems**
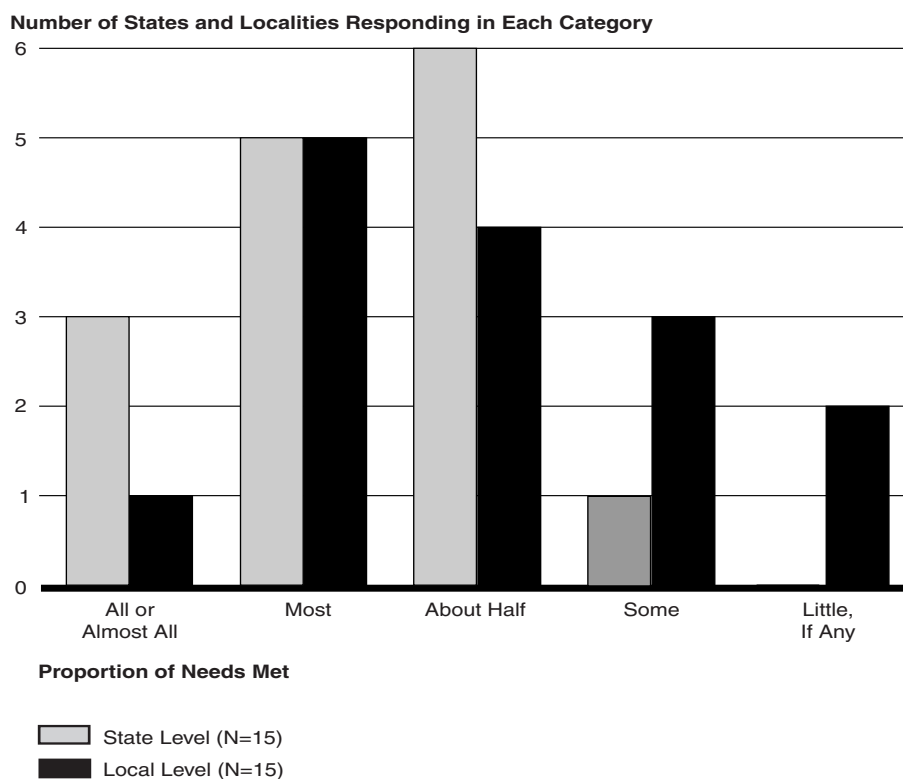
Source: Responses to GAO's questionnaire on automated systems.

Some gaps in information on caseload characteristics occur because the desired data are not contained in automated systems. Other gaps arise because even though the data are contained in automated systems, these data are difficult or impossible to extract in a way that answers the particular question of concern to the program manager. For example, local officials at one site said that the locality does not have adequate access to data it enters into the state welfare system and that writing the computer program needed to extract the data generally takes an entire day. Officials at a locality in another state said that data on the characteristics of TANF recipients contained in the state's automated systems are often not available in a format that can be easily manipulated, so obtaining data depends on the technical expertise of the user. Overall, local officials cited a need for user friendly tools that provide the capability to generate a locally designed management report.

As shown in table 1, automated systems in the states that we studied can provide information on some characteristics of TANF caseloads but not others. The ability to identify long-term welfare recipients can be useful because they may possess characteristics that make them harder to serve. When we asked whether officials could identify their current "hard-to-serve" TANF cases by identifying cases that include adults who either are long-term welfare recipients or have multiple barriers to employment, states and localities generally said that their automated systems provide this capability. For example, state officials in Georgia and Washington told us that their automated systems had been programmed to identify recipients who have received cash assistance for 30 months or more. In comparison with long-term recipients, adults who have repeatedly cycled on and off welfare may differ somewhat in their service needs. Local officials generally said that they are unable to identify such cases in their caseloads. Responses from state officials varied: while some said that they cannot identify such cases, others said that they can do so with some difficulty.[10]

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[10] GAO recently issued a report that provides information on the characteristics of TANF recipients, strategies states are using to help hard-to-employ TANF recipients get and keep jobs, and the challenges states face in planning and implementing these strategies. See Welfare Reform: Moving Hard-to-Employ Recipients Into the Workforce (GAO-01-368, Mar. 15, 2001).

Table 1: Capabilities of Automated Systems in Six States to Provide Program Managers With Information on Selected Caseload Characteristics

Caseload characteristic	Can state program managers obtain this information from automated systems?[a]	Can local program managers obtain this information from automated systems?[a]
Number of adults in the state/local TANF caseload		
With no prior work experience	Generally can	Generally cannot
Assessed as having substance abuse problems	Cannot	Generally cannot
Assessed as having mental health problems	Cannot	Generally cannot
Current state/local TANF cases that		
Include adults who are long-term welfare recipients or have multiple barriers to employment	Generally can	Generally can
Have cycled on and off AFDC/TANF in the state in the last 5 years	Vary	Generally cannot

[a]"Generally can" means that at least 70 percent (but less than 100 percent) of respondents said that the activity can be performed using their current automated systems, whereas "generally cannot" means that 30 percent or less (but more than 0 percent) responded in this way. "Vary" means that from 31 to 69 percent of respondents said that the activity can be performed using their current automated systems. In calculating percentages, we excluded the small number of instances in which either we did not obtain a response or respondents said that they did not know.

Source: Interviews with state and local officials in Georgia, New Jersey, Ohio, Texas, Washington, and Wisconsin.

Our overall findings about the capabilities of state automated systems are consistent with the findings from prior work by the Rockefeller Institute. On the basis of its field research in 20 states, the Rockefeller Institute concluded that existing welfare information systems are geared much more towards overseeing a process focused on the determination of eligibility and provision of cash assistance rather than the complex service systems involved in helping families obtain employment.[11] Rockefeller Institute field researchers asked state and local administrators about their abilities to obtain answers to a series of questions about their TANF caseloads. Researchers used a five-point scale to categorize the capability to answer each question, with "1" indicating that the information could not be obtained under any circumstances and "5" indicating that

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[11] Richard P. Nathan and Thomas L. Gais, <u>Implementing the Personal Responsibility Act of 1996: A First Look</u> (Albany, NY: The Nelson A. Rockefeller Institute of Government, 1999).

the information can be obtained and usually is generated as part of routine reports. Overall, the questions related to eligibility and case status had higher average scores (3.9 for state administrators and 3.8 for local administrators) than the questions about work status and employment barriers (3.6 for state administrators and 3.1 for local administrators). Among the questions with the lowest scores for both state and local administrators—ranging from about 2 to 3 on the scale—were those about potential employment barriers of families, such as whether they have access to an automobile, have no prior job experience, have been diagnosed as having mental health or substance abuse problems, or have children involved in cases of abuse or neglect.[12]

The Rockefeller Institute study also highlighted another key theme that emerged in our fieldwork: lower reported capabilities to obtain information at the local level than at the state level in many cases. As summarized in the Rockefeller Institute study, "our conclusion is that most welfare information systems are a long way from adapting to the new management needs of a work-based program, and they are particularly limited in providing information to local managers and workers who have been given the main responsibility for making these programs work."[13] For example, the average score was lower for local administrators than for state administrators for every one of the 23 questions related to the availability of information on TANF recipients' work status or employment barriers.

Automated Systems Vary in Capabilities to Support Program Oversight

Another way in which automated systems can support welfare reform is by providing information for program oversight and, in particular, information for monitoring measures of program performance. As shown in figure 4, the 15 states and localities we surveyed varied considerably in their assessments of the level of automated support available for monitoring performance measures related to helping TANF recipients find
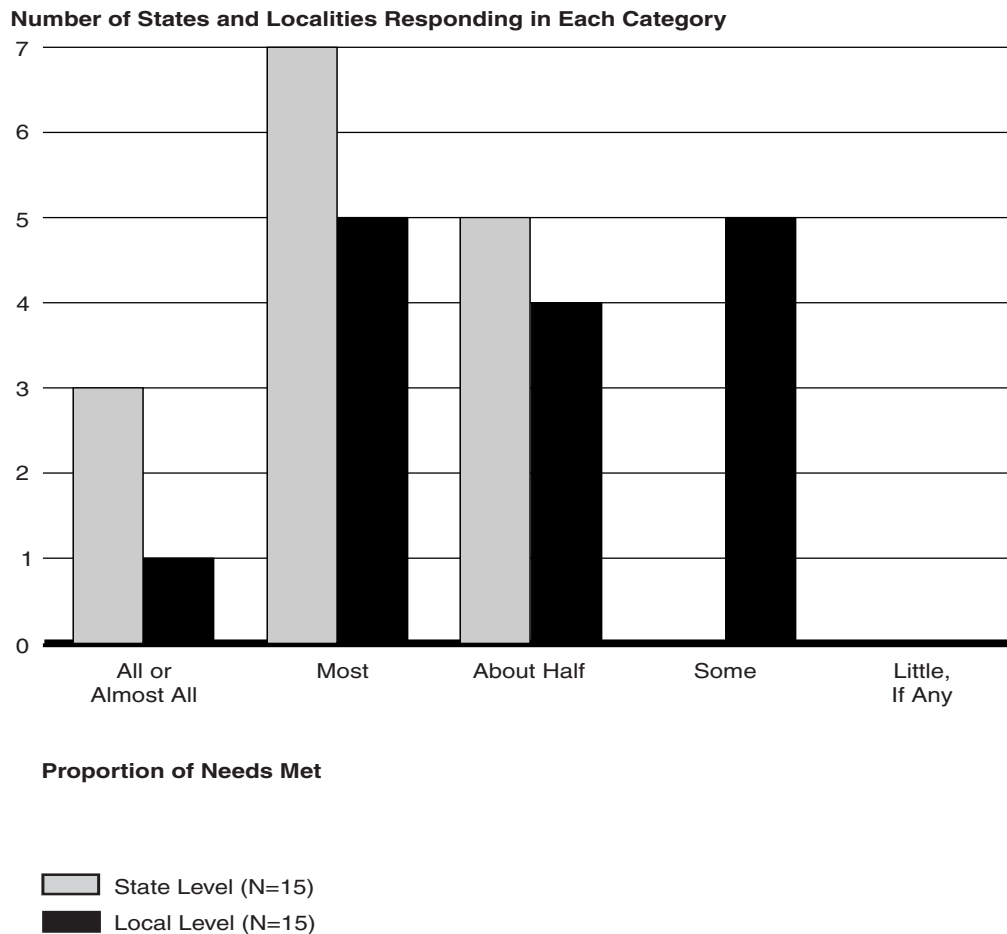
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[12] A score of "2" on the Rockefeller Institute's scale indicates that information cannot be obtained under any circumstances; even though the component data are collected, they cannot be collated in a way that answers the question. A score of "3" indicates that while information can be obtained, this requires costly, non-routine manipulation and analyses of existing databases.

[13] Implementing the Personal Responsibility Act of 1996, p. 58.

jobs and become economically independent. Local officials tended to assess the level of automated support lower than state officials did. State officials from 10 of the 15 states indicated that automated systems provide all or most of the information needed by state program managers, and officials from 6 of the 15 localities responded that systems provide all or most of the information needed by local program managers.

Figure 4: Proportion of Information Needed for Monitoring Program Performance With Respect to Employment Progress of TANF Recipients That Is Provided by Automated Systems

Number of States and Localities Responding in Each Category

Proportion of Needs Met

State Level (N=15)
Local Level (N=15)

Source: Responses to GAO's questionnaire on automated systems.

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With regard to monitoring the employment progress of TANF recipients, state officials in the six states in which we did in-depth work said that their states have data on job entries, job retention, and wage progression and have used these data to apply for the TANF high-performance bonus.[14] The states varied in the sources they used to obtain these state-level data: state unemployment insurance data, TANF administrative data, or both. In contrast, local officials in the six states reported having more limited capabilities to monitor the employment progress of TANF clients at the local level. Local officials generally can obtain data from automated systems on the number of TANF clients in a locality who have entered employment in some specified time period. However, local officials vary in their automated capabilities to obtain aggregate information on the job retention of these recipients and generally cannot obtain aggregate information on recipients' wage progression.

Diversion is a central component of many states' welfare reform programs. The object of diversion strategies is to meet the needs of potential TANF recipients in ways other than through monthly cash assistance, such as by having them engage in immediate job search to obtain employment quickly; providing one-time cash payments; or providing support services, such as child care and medical assistance. The ability to obtain aggregate information on this strategy can facilitate program oversight by highlighting the frequency with which potential recipients are diverted for various reasons. State officials in the states that we visited generally said that they have automated capabilities to determine the number of families that have received one-time cash diversion payments. Officials in some of these states reported that their automated systems also provide information on other types of diversions. For example, Wisconsin's automated welfare system tracks the number of people diverted fromTANF for a range of reasons and uses separate codes to track people who have been screened for TANF eligibility and those who have not.

Information on the use of human service programs by families after they exit TANF can help program managers determine whether families are receiving services such as

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[14] PRWORA authorized HHS to award federal dollars to states with exceptional performance in achieving

Medicaid and food stamps, which can facilitate families' efforts to retain employment and increase their wages. Conversely, information on families' use of human service programs after they exit TANF can also help program managers determine whether families are reducing their dependence on government-provided benefits over time. State officials in the states we visited generally said that they have automated capabilities to determine what percentage of families that have left TANF within some time period are receiving Medicaid or food stamps some specified period of months after leaving TANF. Capabilities to obtain this information varied at the local level. In contrast, both state and local officials generally said that they did not have the capability to determine how many children are placed in foster care within some specified time after their families leave TANF. This information gap limits the ability of program managers to monitor the extent to which TANF case closures are associated with subsequent financial hardship that could lead to child abuse and neglect.

CONCLUSIONS

Our work highlights the need for systems modernization to better meet the information needs for administering and overseeing welfare reform. First, the overall assessments by local and state officials of their own automated systems reveal some major gaps in capabilities. Over half of the local officials we surveyed said that their current systems provide half or less of the information needed for case management, service planning, and performance monitoring. Overall, state officials provided a somewhat higher assessment of system capabilities but still acknowledged major information gaps in some cases. Second, our in-depth fieldwork identified some key areas in which greater capabilities are needed. For example, a recurrently voiced theme of state and local officials was the need for more data sharing across automated systems, especially to provide better support for case managers in integrating services to their clients. In addition, officials highlighted the need for expanded capabilities to query automated systems, especially to support local program managers in obtaining the information they need to meet their particular management challenges.

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the goals of TANF.

Experience shows that developing new automated systems or modifying existing systems to meet current needs can be a complex and difficult undertaking. This is certainly true in the current environment, in which states face significant obstacles to managing complex information systems projects.[15] What is needed is a systematic, collaborative effort to identify and explore the most promising approaches to overcoming these obstacles—an "action agenda" for the modernization of automated systems. This kind of focused attention on the ongoing and evolving process of improving states' automated systems for human services could ultimately help bring about more effective and efficient service delivery for low-income families.

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[15] GAO has issued two recent reports that examine the barriers to data sharing for the purpose of reducing improper payments made to individuals through federal benefit and loan programs. Both reports discuss ways to advance such data sharing arrangements. See Benefit and Loan Programs: Improved Data Sharing Could Enhance Program Integrity (GAO/HEHS-00-119, Sept. 13, 2000) and The Challenge of Data Sharing: Results of a GAO-Sponsored Symposium on Benefit and Loan Programs (GAO-01-67, Oct. 20, 2000).